



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

MAR 18 2013

REPLY TO THE ATTENTION OF: E-19J

Brenda Halter, Forest Supervisor
Superior National Forest
318 Forestry Road
Aurora, Minnesota 55705

**Re: Boundary Waters Canoe Area Wilderness (BWCAW) Non-native Invasive Plant (NNIP) Management Project and Draft Environmental Impact Statement (Draft EIS), Superior National Forest (Forest), Cook, Lake, and St. Louis Counties, Minnesota
CEQ No. 20130016**

Dear Ms. Halter:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act, we are providing comments on the NNIP Management Project and Draft EIS dated January 2013.

The Forest Service has proposed a NNIP management plan in the Draft EIS and Management Project to prevent widespread natural resource impacts from NNIPs within the BWCAW. According to the Forest Service's analysis, the BWCAW is approaching a "tipping point" regarding NNIPs. To address this issue, the Forest Service is proposing to address NNIPs while their occurrence in the BWCAW is relatively low. Approximately 14 acres of NNIPs found mostly at campsites and portages in the project area as well as approximately 600-650 acres of future NNIP infestations expected during the next 10 years are proposed for treatment. A 10-year period was deemed necessary to treat NNIPs because many of the NNIP species produce seeds that can remain viable in the soil for 7-10 years or more.

The Draft EIS analyzes impacts from the No Action alternative and two action alternatives. The No Action alternative would treat NNIPs under the existing management decision (the 2006 Decision Notice) using only manual treatment methods (pulling, cutting or digging up) to eradicate or contain approximately 5.5 acres of NNIPs found in the BWCAW in 2006 plus approximately 8.8 acres of NNIPs found since 2006, for a total of 14.3 acres. The No Action alternative would include an integrated pest management (IPM) approach, with the exception of herbicide use. IPM includes existing programs of prevention, coordination, inventory and monitoring, as well as education to reduce the risk of future NNIP impacts.

Alternative 2 consists of a combination of herbicides and manual treatment methods as well as the IPM approach identified as part of the No Action alternative.

The issue of the effect of herbicide use on the wilderness character of the BWCAW, identified as a concern during scoping, led the Forest Service to develop Alternative 3. Alternative 3 proposes to use only manual NNIP treatment methods in addition to the above-mentioned IPM approach to treat the current and future acreages noted above.

Alternative 2 is the Forest Service's Proposed Action. The Forest Service has determined that, while there will be a short-term impact to the natural quality of the BWCAW from herbicide use, the long-term benefits of herbicide use in containing and eradicating NNIPs outweigh short-term impacts. The Draft EIS discusses the ineffectiveness of hand pulling for most NNIPs in the BWCAW. Given the rhizomous species found on the BWCAW, hand pulling can disturb soil and enhance germination of weed seeds, causing more weed spread to occur with implementation of the No Action or Alternative 3.

Based on our review of the Draft EIS, EPA has rated the Draft EIS as "**Environmental Concerns – Insufficient Information (EC-2).**" This rating is based on the potential discharge of pesticides to surface waters in the BWCAW, pesticide labeling requirements, proper pesticide storage and transport, and training for pesticide applicators. Finally, we find the information concerning Regional Forester's Sensitive Species to be incomplete; its inclusion would accommodate a more comprehensive analysis. We have enclosed our ratings definitions and our detailed comments.

Thank you in advance for your consideration of our comments. We are available to discuss the contents of this letter with you at your convenience. Please send a copy of the Final EIS once it is available. If you have any questions, please contact me at 312-886-2910, Kathy Kowal of my staff at 312-353-5206, or via email at kowal.kathleen@epa.gov. For surface water-related questions, please contact Mark Ackerman of our National Pollutant Discharge Elimination Branch at 312-353-4145 or via email at ackerman.mark@epa.gov; for pesticide-related questions, please contact Margaret Jones of our Chemicals Management Branch at 312-353-5790 or via email at jones.margaret@epa.gov.

Sincerely,



Kenneth A. Westlake
Chief, NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosures – USEPA's Detailed Comments
Ratings Definitions

cc: Jack Greenlee, Forest Plant Ecologist
James McDonald, Regional Environmental Coordinator, USFS, Milwaukee, Wisconsin
John Peckham, Minnesota Department of Agriculture

Detailed Comments for the Boundary Waters Canoe Area Wilderness (BWCAW) Non-native Invasive Plant (NNIP) Management Project and Draft Environmental Impact Statement (Draft EIS), Superior National Forest (Forest)
March 18, 2013

Discharge to Surface Waters

The BWCAW is designated as an outstanding resource water in the State of Minnesota. This designation prohibits the discharge of waste to waters within the BWCAW (Minn. R 7050.0180 subp. 3). The Conclusion for Section 3.3, Water Resources states, “No herbicide would be discharged to water bodies under Alternative 2.” However, the maps in Appendix A show NNIP infestation to be predominantly located on or near water bodies within BWCAW. The proximity of NNIPs relative to water bodies raises concerns about whether discharges to water bodies resulting from the application of herbicide can be completely prevented to ensure the prohibition is satisfied. Even though the EIS indicates that there will be no discharge to water bodies, it’s unclear how, and whether this can be accomplished.

RECOMMENDATION: We suggest that the following statement, “No herbicide would be discharged to water bodies under Alternative 2” be qualified to ensure that there will be no discharge of herbicide to water bodies within the BWCAW consistent with the aforementioned prohibition. Since the Minnesota Department of Natural Resources (MDNR) is authorized to implement the NPDES program, we encourage the Forest Service to consult with the MDNR regarding the proposed use of herbicide within the BWCAW.

We would also like to point out that there are instances in Appendix B, Operational Standards and Guidelines (noted below in *italics*) that suggest a discharge to surface waters will happen during the course of this project:

MFRC-PU-7 Select pesticides, application methods, equipment, and formulations that:

- Minimize the potential for pesticide drift
- *Minimize pesticide residue movement to surface water and ground water*

RECOMMENDATION: We suggest modifying this language to reflect that any discharge to surface water is prohibited.

MFRC-PU-34 *Avoid applying pesticides directly to water except where specifically labeled for application to water.*

RECOMMENDATION: We suggest modifying this language to reflect that any discharge to surface water is prohibited.

MFRC-PU-35 *Avoid cleaning pesticide application equipment in surface waters.*

RECOMMENDATION: We suggest modifying this language to prohibit this practice.

Pesticides

Use of Pesticides and Wild Rice

As noted on pages 52 and 53 of the Draft EIS:

“Alternative 2 would also have a very low risk of negative effects to aquatic animal life. For the four herbicides, no route of exposure or scenario suggests that the proposed use of any of the herbicides would put aquatic life at risk. For each of the scenarios in the ecological risk analysis, the HQ is below 1.0 and thus there is no plausible risk to aquatic life from these herbicides (SERA 2004, SERA 2004, SERA 2007a, SERA 2011a). Unlike some compounds like mercury, none of the proposed herbicides bioaccumulate, so there is no risk that they would enter the aquatic food chain and build up in tissues of animals at the top of the food chain.

Wild rice would not be affected by herbicide treatments of NNIP in the project area. Because of the project design such as wiping on herbicides to upland NNIP species that occur within 25 feet of the water as well as on wetland NNIP species like purple loosestrife, there would be no risk that herbicides would cause mortality or damage to individual wild rice plants or wild rice stands. Herbicides would have no effect on wild rice since wild rice grows in deeper water than purple loosestrife, and because there are only three lakes where purple loosestrife and wild rice grow in the same lake. Crews performing treatments would be trained not to confuse wild rice with purple loosestrife.”

Even though the pesticides would be applied “25 feet” from the water, it is evident that some product may reach water if applied to “purple loosestrife in shallow water.” The Draft EIS states in Table 2 that the pesticide triclopyr is proposed to control purple loosestrife. As stated above, it is apparent that purple loosestrife may be growing in water not far from wild rice stands. If the pesticide is applied to purple loosestrife in water, the product could spread and reach other aquatic plants, including wild rice stands.

RECOMMENDATION: In the instance wild rice is harvested, there may be a need for a tolerance (allowable limit for pesticides in food) in case any pesticide residues end up in the wild rice. We recommend the Final EIS address the issue of how the herbicide will be prevented from reaching wild rice stands and the need for a tolerance.

Additionally, if wild rice is being grown under organic cultivation practices, the Forest Service should commit to check with the grower(s) before proceeding with any pesticide applications to those areas (i.e., notification of and working with producers).

Comparison of different pesticides in water

Comparing levels of different pesticides in water may not be valid as each pesticide can differ in toxicity. Some are toxic at very low concentrations and others at greater concentrations. Therefore, comparing the level of herbicides proposed for use under the Draft EIS to 500 micrograms per liter “benchmark” for picloram may not be valid.

RECOMMENDATION: The EPA Office of Pesticide Programs (OPP) should be consulted in order to determine whether this comparison is valid and the EIS revised appropriately.

Use of Pesticides

A number of statements describe the plan to use herbicide treatments over the next ten years (i.e., Table 6, Comparison of Alternatives and Effects); however, these statements are not qualified with the language, “according to the pesticide label.”

RECOMMENDATION: We recommend the appropriate references to herbicide treatment be revised to add the language “according to the pesticide label.”

Language on pesticide labels will supersede statements in the EIS on pesticide use

Statements made in paragraph 3, page 19 and in paragraph 3, page 22 indicate that all herbicides would be used according to manufacturer label directions. However, a statement found on page 19 (last line) indicates: “There would be one herbicide application per site per year with follow-up monitoring and possible treatment in subsequent years.” Language that prescribes pesticide use and timing, such as the language found in paragraph 3, page 22, should be consistent with the pesticide label.

RECOMMENDATION: A comment should be added to the effect that label directions and limitations would take precedence, as required by law, over any general pesticide application objectives of the project. All general statements about frequency and timing of pesticide applications should be consistent with language found on the pesticide label.

Specific Comments regarding Table 2 Proposed Herbicides and Treatment Methods

Cadre® herbicide (imazapic, active ingredient), EPA Registration Number 241-364 and EPA Registration Number 241-381, is currently registered *only for use on peanuts in southern states*. This product would likely not be available for sale in the State of Minnesota and would not be labeled for use as described in the Draft EIS.

RECOMMENDATION: We recommend the information found in Table 2 of the Draft EIS be removed, unless appropriate registration, such as a Special Local Needs [Section 24(c)] or Emergency Exemption (Section 18) of Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), can be demonstrated.

Page 19, Table 2 Plateau and Plateau DG are two different products with different percent active ingredient. Plateau, EPA Registration Number 241-365, has 23% active ingredient; Plateau DG, EPA Registration Number 241-393, has 70% active ingredient.

RECOMMENDATION: A note should be included to the effect that the Use Directions will differ for these two products, which will need to be mixed and loaded differently.

Coordination with EPA OPP

We believe the portions of the Draft EIS which include language describing the review and evaluation of pesticides by EPA, including specific and general statements about pesticides, would benefit from a review by OPP. For example, Section 1.6.1 Herbicide Treatment, on

page 19 states, “All herbicides proposed for use are *approved* by the Environmental Protection Agency and available without special permit.” (emphasis added) EPA does not “approve” pesticides. EPA registers pesticide products and accepts labels based on review of required guideline studies that demonstrate the pesticide meets the standards for registration. EPA does not endorse or approve the use of any pesticide products as this would be a conflict of interest, due to EPA’s registration responsibility.

Additionally, Table D-1, Herbicide Environmental Characteristics, found in Appendix D indicates that a half life in soil for aminopyralid is 130 days (lab study) and 25-38 days in field studies. For risk assessment purposes, EPA used a half life in soil of 103.5 days for aminopyralid (See page 56, Environmental Fate Review, 5/10/05 at http://www.epa.gov/opp00001/chem_search/cleared_reviews/csr_PC-005100_10-May-05_a.pdf). OPP should be consulted regarding which half life in soil is the best reference.

RECOMMENDATION: We recommend the Forest Service contact OPP to review the above topics and include the results of these discussions in the Final EIS. A discussion with OPP could also determine whether there are any recent studies or reviews by EPA which would provide more current information than what is found in the SERA documents, which date from 2004-2011. Lastly, we request a correction concerning EPA “approving” pesticides. Feel free to contact either Dan Kenny at 703-305-7546 or via email at keny.dan@epa.gov or Sherada Hobgood at 703-308-8893 or via email at hobgood.sherada@epa.gov.

Container management, recycling and leftover product disposal

Container management and disposal of pesticides was not discussed in the Draft EIS. This information is required on the label due to regulations which were phased in between 2006 and 2011.

RECOMMENDATION: We recommend the Final EIS include: 1) a section describing the proper management of pesticide containers, including triple rinsing of empty pesticide containers and re-use or transport to a recycling program, and 2) a description of proper storage and disposal of left over products and rinsates. Since the rinsate will contain pesticide in dilute form, it would be considered a discharge under the NPDES program if the rinsate enters the waters within the BWCAW, which is prohibited. The USDA Forest Service may need to coordinate with the Minnesota Department of Agriculture (MDA) and/or Minnesota Pollution Control Agency for pesticide and pesticide rinsate disposal requirements. Also, disposal of rinsate by spraying to the area would not be consistent with the Draft EIS which describes spot treatment with a brush to carefully control where the pesticide goes.

Please note that language on the pesticide label governs whether the container is refillable or nonrefillable (and required to be recycled in an appropriate program). For additional information on the pesticide container and containment regulations, see the following web page: <http://www.epa.gov/pesticides/regulating/containers.htm>

Outreach/training brochures

The pictures that appear on page 21 of the Draft EIS and the last page of the BWCAW NNIP Project Fact Sheet show water bottles, without complete pesticide labels, which are supposed to contain measured amounts of pesticides. Water bottles do not qualify as “service containers”

and may be a violation of pesticide use requirements. Water bottles should not be pictured in training materials. The USFS should find another way to demonstrate the “measured amount” or picture only bottles (preferably not water bottles) with pesticide labels.

Transport of herbicides

A number of comments are made throughout the Draft EIS (see pages 47 and 52 and Appendix F) indicating that herbicides would be transported in their original containers with original labels inside watertight containers to prevent spills. However, Figure 3 and the BWCAW NNIP Project Fact Sheet include photographs of water bottles with the quantity of herbicide which would be used in one year. The bottles are not original and are not labeled.

RECOMMENDATION: We recommend that bottles that could be confused with drinking water bottles should not be pictured or shown as an example as it could be interpreted as a recommendation or suggestion on how to handle the pesticide.

Training for Pesticide Applicators

The Draft EIS was not clear whether Forest Service employees would be the handlers and applicators of pesticides or whether this work would be done by contractors. Moreover, Pesticide Applicator Training was not discussed in the Draft EIS. This is a Guideline for all Forest Service projects (Appendix B, Standard MFRC-PU-22). The University of Minnesota, Cooperative Extension Service conducts training for pesticide applicators. (<http://www.extension.umn.edu/pesticides/>) Training programs usually are held in the winter months. If training and certification is needed (as indicated in Appendix B, Operational Standards and Guidelines, Pesticide Use Standard MFRC-PU-22), this may affect the schedule for implementation of the pesticide control portion of the proposed project.

RECOMMENDATION: A description of who will be applying the pesticides and how they will be trained should be included in the Final EIS. Although the pesticides proposed for application are in the general use category, we recommend the Forest Service check with the MDA to see if any certification of pesticide applicators is needed. This information should be included in the Final EIS.

Effects to Regional Forester’s Sensitive Species (RFSS)

Table 6, Comparison of Alternatives and Effects, provides a summary of effects resulting from implementation of each alternative. If Alternative 2 is implemented, the heather vole and RFSS plants of disturbed habitats or rock outcrops/cliffs could experience small impacts. Similarly, the discussion in Section 3.7.2, Determination of Effects Summary for Terrestrial Wildlife, indicates that Alternatives 1 and 2 may impact individuals of various terrestrial species and Alternative 1 may impact individuals of various aquatic species, but each of the proposed Alternatives is not likely to result in a trend towards federal listing or a loss of viability. Information located in Section 3.7.2 does not provide support for the statement that the impact to various terrestrial and aquatic species if one of the analyzed alternatives is selected is not likely to result in a trend towards federal listing or a loss of viability.

RECOMMENDATION: We recommend the EIS be augmented with more detailed information pertaining to: 1) the type of potential impact to the RFSS species listed in Table 6

and in Section 3.7.2, 2) whether avoidance or minimization methods are available, and 3) a discussion focused on species occurrence, suitable occupied/unoccupied habitat in the BWCAW, and viability of the species in relation to the proposed project.

Agency Coordination

The Distribution List does not include the MDA. MDA has responsibility for ensuring the proper use of pesticides in Minnesota through delegated authority under FIFRA. MDA has primacy for the use provisions of FIFRA, conducts testing and certification of pesticide applicators and can provide helpful comments on the successful execution of this project. EPA notified John Peckham at MDA of the availability of the Draft EIS for comment.